

ABSTRACT OF THE DISCLOSURE

A compact, low loss, transformer-less, reversible dual motor controller for electric vehicles, capable of regenerative braking, and providing good cornering capabilities is described, comprising an AC/DC or DC/DC converter and reversing power switching means to allow either forward or reverse motion. The controller can be modified to allow electric vehicle operation under slippery bottom conditions by the addition of switching means to connect the two DC motors in series across the output of the converter when motoring, and temporarily in "circulating-current-free armature parallel" mode, when one motor spins as a result of slippery bottom conditions.

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